

IN THE CLAIMS:

Please cancel claims 1-25 and enter new claims 26-33 as follows:

Claims 1-25 (cancelled).

26. (new) A process which comprises polymerizing an olefin in the presence of a catalyst system comprising an activator and an organometallic complex-containing mixture, wherein the organometallic complex-containing mixture is made by a method which comprises:

- (a) deprotonating a compound selected from the group consisting of indoles, carbazoles, 8-quinolinols, 2-pyridinols, and mixtures thereof, with an alkylolithium compound to produce an anionic ligand precursor; and
- (b) reacting the anionic ligand precursor with about 0.5 equivalents of a Group 4 transition metal tetrahalide at a temperature greater than about 10°C in the presence of a hydrocarbon solvent to produce the organometallic complex-containing mixture.

27. (new) The process of claim 26 wherein the catalyst system includes methyl alumoxane as an activator, and the methyl alumoxane is used at a [Al:M] molar ratio less than about 500.

28. (new) The process of claim 26 wherein the catalyst system is stored for up to about 90 days prior to use in the process.

29. (new) The process of claim 26 wherein the organometallic complex-containing mixture from step (b) is concentrated without removing insoluble products.

30. (new) A process which comprises polymerizing an olefin in the presence of a catalyst system comprising an activator and an organometallic complex-containing mixture, wherein the organometallic complex-containing mixture is made by a method which comprises:

- (a) deprotonating a compound selected from the group consisting of indoles, carbazoles, 8-quinolinols, 2-pyridinols, and mixtures thereof, with an alkylolithium compound to produce an anionic ligand precursor; and

(b) reacting the anionic ligand precursor with about 1 equivalent of an indenyl Group 4 transition metal trihalide at a temperature greater than about 10°C in the presence of a hydrocarbon solvent to produce the organometallic complex-containing mixture.

31. (new) The process of claim 30 wherein the catalyst system includes methyl alumoxane as an activator, and the methyl alumoxane is used at a [Al:M] molar ratio less than about 500.

32. (new) The process of claim 30 wherein the catalyst system is stored for up to about 90 days prior to use in the process.

33. (new) The process of claim 30 wherein the organometallic complex-containing mixture from step (b) is concentrated without removing insoluble products.